

**JOB DESCRIPTION**  
**MURFREESBORO WATER AND SEWER DEPARTMENT**  
**SENIOR LABORATORY TECHNICIAN**

**1. JOB TITLE:** SENIOR LABORATORY TECHNICIAN

**2. DEFINITION:** The Senior Plant Laboratory Technician performs skilled work in the analyses of process control and other samples at the water/wastewater treatment plant, under the direction of a Chief Laboratory Technician. All employees are responsible to the Director and to the City Manager. This position is classified as Non-Exempt for the purpose of the Fair Labor Standards Act, as having a possible occupational exposure to bloodborne pathogens, and as Safety Sensitive; the employee is subject to pre-employment, reasonable suspicion, post-accident, random, promotion and transfer, return to duty and follow-up drug and alcohol testing.

**3. EQUIPMENT/JOB LOCATION:**

- a. This position requires the use of laboratory and field equipment, vehicles, various communication devices, personal computers, and other standard office equipment and accessories customarily used in an office environment.
- b. The job is sited at the water or wastewater treatment plant, but involves various locations throughout the system. The employee will be required to work occasionally in inclement weather while collecting samples. All City facilities and vehicles are smoke-free locations.

**4. ESSENTIAL FUNCTIONS OF THE JOB:**

- a. Using proper protocol, correctly and accurately performs analyses which may include but are not limited to, alkalinity, ammonia, bacteriological, biochemical oxygen demand, pH, chlorine residual, carbon dioxide, dissolved oxygen, filterable residue, fluoride, hardness, jar tests, metals, oil and grease, potassium permanganate demand and turbidity. Analyses may involve exposure to biological, chemical, electrical and physical hazards.
- b. Accurately performs record keeping and mathematical calculations.
- c. Makes accurate and legible entries in English in operational logs, charts and records, both manually and by computer keyboard, and prepares reports.
- d. Detects and responds correctly to odors and colors indicative of laboratory test points, hazardous gases, and upset processes.
- e. Senses vibration by touch, temperature by proximity, and audible alarms and indicators of equipment malfunctions in normal aural range and responds correctly to these inputs.
- f. Reads gauges, dials, equipment information plates, charts, and manuals, and makes adjustments and calibrations.
- g. Does work requiring depth perception, and detects changes in the visual appearance of substances, including but not limited to colorimetric end points.

- h. Uses small hand tools, calculators, keyboards and laboratory equipment.
- i. Complies with department policies and safety rules.
- j. Identifies and responds correctly to biological, chemical, electrical, mechanical and physical hazards.
- k. Demonstrates a good work ethic, including a willingness to perform job place tasks and to assist coworkers without redundant directive.
- l. Establishes and maintains effective working relationships with supervisors, coworkers and the public.
- m. Performs repetitive tasks requiring meticulous attention to detail.
- n. Sits, stands, stoops and walks intermittently.

## **5. ADDITIONAL EXAMPLES OF WORK PERFORMED:**

- a. Working independently and/or with others, collects and transports samples from various locations using proper sample handling protocol. Sample collection may involve climbing, lifting, entry into confined spaces, manholes and other hazardous sites, and exposure to biological, chemical, electrical and physical hazards.
- b. Performs other duties and special projects as assigned.

## **6. REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

- a. Must be at least 21 years of age.
- b. Must possess a high school diploma or GED from an accredited institution.
- c. Must have legal authorization to work in the United States.
- d. Must possess a driver's license valid in the State of Tennessee with the ability to safely operate a motor vehicle.
- e. Must consent to and pass a pre-employment drug screening.
- f. Must be able to comprehend both oral and written instructions and to communicate in English, both orally and in writing.
- g. Must be able to perform mathematical calculations with fractions, decimals, percentages and the metric system.
- h. Must be able to demonstrate basic knowledge of laboratory operation and terminology.
- i. Must have knowledge of basic laboratory safety rules and equipment, including identification of, precautions for, and emergency response to biological, chemical, electrical, mechanical and physical hazards.
- j. Must be able and willing to wear personal protective safety equipment and perform job tasks that require the use of such equipment.
- k. Must be able to lift and carry small ice chests weighting up to 15 pounds.
- l. Must demonstrate good workmanship, performing tasks neatly and in a timely manner.
- m. Must be able to report on time for work and perform the duties of the position as required. May be required to work evening, night, weekend and/or holiday shifts.
- n. Must maintain a neat, clean and acceptable personal appearance.
- o. Must be able to establish and maintain effective working relationships with supervisors, coworkers and the public.

- p. Must demonstrate a good work ethic, including a willingness to perform job place tasks and to assist coworkers without redundant directive.
- q. Previous training and/or experience in water/wastewater sampling and analyses is desirable but not required.

Non Exempt  
Safety Sensitive  
September 18, 2007